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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,659	11/24/2003	Henry C. Chu	14068 B	9601

36672 7590 04/05/2006

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EXAMINER

BELT, SAMUEL E

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/722,659

Applicant(s)

CHU, HENRY C.

Examiner

Samuel E. Belt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 2 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

- Recitation of "and may be...cheapest ones" on page 5, lines 24-25 would be clearer rewritten as --using the most efficient and cheapest methods--,  
Appropriate correction is required.

### ***Claim Objections***

Claims 1-2 are objected to because of the following informalities:

- Recitation of "said cam member, to alternatively actuate said shaft to move axially relative to said cylinder" in Claim 1, lines 7-8, is not clear in context. The shaft is not moving axially. Applicants may wish to consider using terminology such as --said cam member and alternatively moveable axially relative to said cylinder when actuated by said shaft--.
- Recitation of the "the other vehicles" in Claim 1, line 18, lacks antecedent basis. This limitation would be clearer if rewritten as --another vehicle--.  
Applicants may wish to consider amending Claim 1, line 14, such that "one vehicle" is written as --one type of vehicle-- and following up in line 18 as --another type of vehicle--.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "cylinder" in Claim 1, line 3 is used by the claim to mean "cylinder block", while the accepted meaning is "hollow circular shaped body." The term is indefinite because the specification does not clearly redefine the term.

In this instance, "a shaft rotatably and slidably received in said cylinder" is not clear in context because the shaft would be located in the hollow area of an ordinary cylinder. The shell and the cylinder are related through their integralness or lack thereof, which does not patentably distinguish a structure over the prior art. Referring to the cylinder block as a "cylinder" renders the claims indefinite because the relationship between the shell and cylinder is not clearly set forth.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. (5,733,107), in view of Shockey et al. (5,470,207).

Ikeda et al. teach a shell 11, a cylinder 20 disposed in the shell, a shaft 17 received in the cylinder and a cam member 24 disposed on said shaft. Ikeda et al. further teach at least three (see Figure 2) pistons 21 slidably received in said cylinder and engageable with said cam member and two valve plates 13 disposed on ends of said cylinder. Ikeda et al. further teach a first cover 14 and a first cap 12 secured 15 to said ends of the shell to enclose and retain the cylinder, shaft, pistons and valve plates within the shell and for attaching to one vehicle (not labeled but clearly seen in Figure 1 as bolt holes in cover and cap; further see column 4, lines 15-16).

Although Ikeda et al. teach most of the limitations of the claims, including a first cover and cap, they do not disclose a second or third cover and cap attachable to other types of vehicles. Shockey et al., disclosing a vehicle's compressor 12, teach simply changing brackets 16/18 enabled attaching the compressor to at least three types of vehicles (column 2, lines 3-12 and column 3, line 60 to column 4, line 10). Shockey et al. teach the universal (see title) mounting bracket advantageously reduced costs (column 2, lines 12-17). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the universal design taught

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by Shockey et al., with the cap and cover disclosed by Ikeda et al., to have advantageously reduced costs.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kamiya et al. (6,957,950) teach a compressor having an adjustable mounting end cap and cover.
- Herder et al. (6,460,823) teach a mounting lug for a compressor that facilitates mounting a single compressor on a variety of vehicles (see Abstract).
- Kato (5,941,693) teaches a cylinder block inside a shell.
- Terauchi et al. (4,600,367) teach a universal mounting bracket for different engines (column 1, lines 30-40).
- Gunnaway (3,587,406) teaches a compressor adaptable to different vehicles (column 1, lines 5-15).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel E. Belt whose telephone number is (571) 272-7820. The examiner can normally be reached on M-F, 8 - 4:30EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Thorpe can be reached on (571) 272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB

  
Samuel E. Belt  
03/31/2006

  
TAE JUN KIM  
PRIMARY EXAMINER